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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,659	11/10/2000	Adam Roth	4056-4000	4294

7590 12/30/2003

Morgan & Finnegan LLP  
345 Park Avenue  
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EXAMINER

NOLAN, DANIEL A

ART UNIT	PAPER NUMBER
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2654

8

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

## Office Action Summary

**Application No.**

09/709,659

**Applicant(s)**

ROTH ET AL.

**Examiner**

Daniel A. Nolan

**Art Unit**

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15,30-44,59-73,88,90 and 92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15,30-44,59-73,88,90 and 92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on 08 December 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(Note also that this application has been included in **Art Unit 2654**, and that this AU number should be used in all future correspondence.)

### ***Response to Amendment***

2. The response filed 08 December 2003 was entered with the following effect:
  - The title was changed as indicated and the objection is withdrawn as satisfied.
  - The specification was changed as indicated and the objections are withdrawn as having been satisfied.
  - The claims were changed as indicated and the objections are withdrawn as satisfied.

### ***Drawings***

3. The proposed drawing correction was received on 08 December 2003.  
The drawing is accepted and the objection is withdrawn as satisfied.

***Response to Arguments***

4. Applicant's arguments filed 08 December have been fully considered but they are not entirely persuasive.

- The objection to the term "*speech movement image*" used in claims 9, 11, 40, 67 and 69 is withdrawn as the specification is provided by the "speaking face" and "animated sequence" at the end of page 20.
- Regarding the argument on behalf of claims 1, 30 and 59; that the avatar of Costello does not satisfy the requirement for the likeness of "a sender", the claimed likeness does not require an absolute correlation to the sender, but rather the nonspecific "**a likeness of a sender**" allows any likeness to be provided as a representation of the sender. The cited prior art reads on the features of the claim, particularly considering that the invention does not involve verification of identity.
- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The argument for "**the sender**" (response, 14<sup>th</sup> line page 22, 5<sup>th</sup> line from end page 23, & *et al*) are not recited in the rejected claim(s) for "**a sender**" (claim 1 line 7 *et al*). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In support of this position, the use of concealed identities has been well-known in both the art of signal processing as well as to practitioners and users of e-mail, chat-room, telephone and any other

communications where correspondents are anonymous or unverified. The rejections are maintained.

- In response to the applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what motivates the disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971).

References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. *In re Bozec*, 163 USPQ 545 (CCPA) 1969. In this case, the related features of *an avatar capable of conveying emotions* are combined and were so addressed because, as cited, it would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to use the Cosatto et al method in the method/system of Johnson et al because Cosatto et al teaches one of ordinary skill in the art the benefit of using his invention to provide a credible likeness of a sender.

***Claim Rejections - 35 USC § 103***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Johnson et al.<sup>'383</sup> & Johnson et al.<sup>'910</sup>**

6. This preliminary statement is required to explain that two separate prior arts from the same source are applied to this action as distinct but related in a manner that requires them to be combined. One reference reads directly on certain features of the application but in terms that reflect the state of the art at the time of that invention. The subsequent reference addresses features that are not a concern of this application but provides a clear and concise description of contemporary art, effectively rephrasing the earlier art to employ the same terminology as the application.

Specifically, the primary reference (Johnson et al.<sup>'383</sup>) provides in the background a concise description of e-mail that satisfies the intent features of the art. Preceding this, the secondary reference from the same source (Johnson et al.<sup>'910</sup>) provides

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substantially the same features but reflective of the art at the time, for instance, describing *message servers* in Johnson et al<sup>'910</sup> and Internet e-mail in Johnson et al<sup>'383</sup>. Consequently, because the methods and features are in common, both instances are designated overall as Johnson et al<sup>(s)</sup> but which are properly referenced separately where required.

Therefore, the common features of messaging and e-mail, taken in conjunction with the common disclosures of embedded multimedia would have made it obvious to a person of ordinary skill to apply the teachings of Johnson et al<sup>'910</sup> in the invention (for *Multimedia Substitution in Messaging*) to the invention of Johnson et al<sup>'383</sup> (for *Natural Language Translation System and Document Transmission Network with Translation Loss Information and Restrictions*) in order to make the elementary mail server concept more widely available by adopting the Internet e-mail messaging capabilities to relieve the burden of maintaining support structures from the intended recipients.

**Johnson et al<sup>(s)</sup> & Cosatto et al**

7. Claims 1-5, 30-34 and 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> (U.S. Patent 5,568,383) in view of Johnson et al<sup>'910</sup> (U.S. Patent 5,434,910) and further in view of Cosatto et al (U.S. Patent 6,112,177).

8. Regarding claims 1, 30 and 59, the Background provided by Johnson et al<sup>'383</sup> for the Document Transmission Network portion of their invention teaches *operating in a network* (the LAN of figure 9 and the *network* of claim 7, lines 19-21) and adding multimedia to E-Mail both to send documents other than text and to enhance the E-Mail

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aesthetically with the description of underlying art provided in the Background (column 1 lines 21-46). Johnson et al<sup>'383</sup> does not specifically mention using these capabilities to embellish mailed documents with an avatar in the form of a likeness of a sender.

With the invention for Co-Articulation for Audio-Visual Text-To-Speech Synthesis, Cosatto et al teaches that it is advantageous to accompany messages with a realistic likeness of the sender, as Background (column 1 lines 19-27). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cosatto et al to the device/method of Johnson et al<sup>'383</sup> so as to provide a credible enhancement conveying emotions that will not be misinterpreted.

- In this, Johnson et al<sup>'383</sup> (column 1 line 26) reads on the feature in the preamble, *for preparing a Multi-Mail message for transmission over a network.*
- Johnson et al<sup>'383</sup> (column 1 line 23) reads on the feature of *receiving data comprising textual content of said message;*
- Cosatto et al (column 1 lines 30-32) read on the features of *creating one or more multimedia components associated with said message, where the multimedia component represents a likeness of a sender (as in column 10-13); and synthesizing multimedia components with said textual content (column 3 lines 28-30).*
- Regarding the distinct features of claim 59, Johnson et al<sup>'383</sup> does not specifically mention a *database*, but Johnson et al<sup>'910</sup> teaches that the *message server* performs the equivalent functions (column 2 lines 43-50) of *storage and retrieval (column 3 lines 40-51).*



Similarly, Johnson et al<sup>'383</sup> is silent on the subject that *the CPU is configured for speech processing*, while Johnson et al<sup>'910</sup> depicts all components of the processor in a manner that agrees with this configuration (304-308 in figure 3).

These cited combinations would have been expected to be within the experience of and therefore obvious to a person of ordinary skill in the art of speech processing at the time of the invention in order to apply the teachings of Johnson et al<sup>'910</sup> to the device/method of Johnson et al<sup>'383</sup> to enable access when required, other than at the time the message is generated.

9. Regarding claims 2, 31 and 60; the claims are set forth with the same limits as claims 1, 30 and 59, respectively. Johnson et al<sup>'383</sup> (column 1 line 24) read on the feature that *the multimedia component comprises audio information*.

10. Regarding claims 3, 32 and 61; the claims are set forth with the same limits as claims 1, 30 and 59, respectively. Johnson et al<sup>'383</sup> (with *graphic* in column 1 line 23) read on the feature that *the multimedia component comprises image information*.

11. Regarding claims 4, 33 and 62; the claims are set forth with the same limits as claims 3, 32 and 61, respectively. Johnson et al<sup>'383</sup> (with the active nature of text-to-speech described as being *Audient* – *adj. listening: paying attention [Ch]* – in column 1 line 45) read on the feature that *the image information may be static or dynamic*.

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12. Regarding claims 5, 34 and 63; the claims are set forth with the same limits as claims 2, 31 and 60, respectively. Johnson et al<sup>'383</sup> does teach using TTS to generate speech for multimedia in mail messages (column 1 line 45) but does not specifically mention that the voice would be that of the author.

Cosatto et al (column 3 line 26-27) uses the author's voice to produce TTS speech, reading on the feature that *the audio component comprises voice data that enables the generation of sounds similar to the user's voice speaking the words of the textual content of the message*. It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cosatto et al to the device/method of Johnson et al<sup>'383</sup> so as to not diminish the credibility of the image.

**Johnson et al<sup>(s)</sup>, Cosatto et al & Lee et al**

13. Claims 6-9, 35-38 and 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> in view of Johnson et al<sup>'910</sup> and further in view of Cosatto et al and further in view of Lee et al (U.S. Patent 6,088,673).

14. With regard to claims 6, 35 and 64; the claims are set forth with the same limits as claims 2, 31 and 60, respectively. While it is common practice in the art of speech synthesis to produce voice using non-specific models to avoid training, economize and make synthetic speech products more flexible, Johnson et al<sup>'383</sup> is silent on this subject.

The TTS Conversion System for Multimedia invention of Lee et al teaches in the Background (column 1 lines 49-55) the feature of *voice data that enables the generation of sounds similar to a generic voice sample*, and subsequently implements (in their Claim 1 lines 57-62) the capability to change voices to match multimedia.

This would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Lee et al to the device/method of Johnson et al<sup>383</sup> when the need arose to synchronize the speech with the multimedia presentation independently of the text.

15. Regarding claims 7, 36 and 65; the claims are set forth with the same limits as claims 2, 31 and 60, respectively. Johnson et al<sup>383</sup> reads on the feature that *comprises voice data that enables the generation of any stored sound (with music and sounds in column 1 lines 26-30)*.

16. With regard to claims 8, 37 and 66; the claims are set forth with the same limits as claims 2, 31 and 60, respectively. Where Johnson et al<sup>383</sup> does not mention *parsing*, Cosatto et al provides the means in the central processor but is silent on the subject of *segmenting into sentences*, Lee et al discloses that the following processing steps will permit synchronization between text and speech:

- Lee et al (column 1 lines 62-65) reads on the feature of *parsing the audio information into sentences and (by specifying the accent in column 1 line 42) for voice modulation controls*.

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- Lee et al (with the detail in column 1 lines 44-48) teaches the feature of *assigning voice modulation to audio information*;
- Lee et al (with the coding at the 1<sup>st</sup> line in table 1, column 3 line 61), reads on the feature of *sequencing phoneme and modulation information* (at the 5<sup>th</sup> line);
- Lee et al (in column 6 lines 10-65) provides three methods (starting at lines 20, 41 & 53) that read on the feature of *translating said phoneme sequence into a sound component sequence*.

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Lee et al on (*parsing into sentences, modulating voice, sequencing and translating into sound*) to the device/method of Johnson et al<sup>383</sup> so as to synchronize TTS with text for high quality.

17. Regarding claims 9 as understood by the Examiner and claim 67; the claims are set forth with the same limits as claims 1 and 60, respectively. Johnson et al<sup>383</sup> does not mention *the synthesis of the image multimedia component*, but Lee et al teaches the advantages of combining speech segments with images (column 6 lines 30-33) makes animated synthesis possible.

- Lee et al (column 6 lines 20-57 & 63-65) reads on the feature of *identifying speech movement image feature*; and
- Lee et al (column 8 lines 37-40) reads on the feature of *generating frames representing movement of said image features*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Johnson et al<sup>'383</sup> in view of Lee et al, such that Johnson et al<sup>'383</sup> *produces mouth movement*, in order to receive the benefit of an articulate facial image that appears to speak.

**Johnson et al<sup>&</sup> Cosatto et al**

18. Claims 10, 39 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> in view of Johnson et al<sup>'910</sup> and further in view of Cosatto et al.

19. Regarding claims 10, 39 and 68; the claims are set forth with the same limits as claims 1, 30 and 59, respectively.

- Johnson et al<sup>'383</sup> (column 1 line 24) reads on the feature that *the multimedia component comprises audio information*, and
- Johnson et al<sup>'383</sup> (with *graphic* in column 1 line 23) read on the feature that *the multimedia component comprises image information*.

**Johnson et al<sup>(s)</sup>, Cosatto et al & Lee et al**

20. Claims 11-12, 40-41 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> in view of Johnson et al<sup>'910</sup> and further in view of Cosatto et al and further in view of Lee et al.

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21. Regarding claim 38 as understood by the Examiner, the claim is set forth with the same limits as claim 39. The features of the claim are the same as those found in claim 9, above, and the claim is rejected for the same reasons addressed in response.

22. Regarding claims 11, 40 and 69; the claims are set forth with the same limits as claims 10, 39 and 68, respectively. Johnson et al<sup>383</sup> is silent on the *sequencing* issue. Lee et al teaches arranging phonemes, mouth frame time and speech movement to correspond to articulate speech.

- Lee et al (with the coding at the 1<sup>st</sup> line in table 1, column 3 line 61), reads on the feature of *composing a phoneme sequence*;
- Lee et al (column 4 line 65 and column 5 lines 66-67) reads on the feature of *composing a mouth frame time sequence which matches the phoneme time sequence*;
- Lee et al (column 6 lines 20-30) reads on the feature of *composing speech movement image frame sequence*; and
- Lee et al (column 8 lines 28-34) reads on the feature of *combining the image and phoneme sequences*.

This would have made it obvious to one of ordinary skill in the art at the time of the invention to modify Johnson et al<sup>383</sup> in view of Lee et al, such that Johnson et al<sup>383</sup> includes *composing phoneme with matching images of mouth frame time into speech movement image frame sequence to produce combined image and phoneme sequences* in order that the image would credibly appear to recite the same text.

23. Regarding claims 12, 41 and 70; the claims are set forth with the same limits as claims 10, 39 and 68, respectively. Johnson et al<sup>'383</sup> is silent on the subject of *varying components*. Lee et al teaches diversifying speech (in column 7 lines 10-12) by *varying one or more of said components to convey one or more senses of said message content*, which would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Lee et al to the device/method of Johnson et al<sup>'383</sup> so as to alter the synthesized text, for example, by the familiar practice of simulating with a different voice or *sotto voce* when quoting or speaking an aside.

**Johnson et al<sup>'383</sup>, Cosatto et al, Lee et al & Kirksey et al**

24. Claims 13, 42 and 71 are rejected under 35 U.S.C. 103(a) as being rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> in view of Johnson et al<sup>'910</sup> and further in view of Cosatto et al and further in view of Lee et al and further in view of Kirksey et al (U.S. Patent 5,938,447 A).

25. Regarding claims 13, 42 and 71; the claims are set forth with the same limits as claims 12, 41 and 70, respectively. Johnson et al<sup>'383</sup> is silent on the subject of emotions in multimedia or e-mail. Kirksey et al teaches the ability for making an audio-visual work with a series of visual word symbols coordinated with oral word utterances to convey additional meaning in the form of emotions, with the table (column 11 lines 25-

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32) reading on the feature that *the senses of said message content correspond to one or more sender emotions associated with said message*. It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Kirksey et al to the device/method of Johnson et al<sup>383</sup> so as to have the appearance of a text match the context of the message.

**Johnson et al<sup>(s)</sup>, Cosatto et al, Lee et al, Kirksey et al & Skelly**

26. Claims 14-15, 43-44 and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>383</sup> in view of Johnson et al<sup>910</sup> and further in view of Cosatto et al and further in view of Lee et al and further in view of Kirksey et al and further in view of Skelly (U.S. Patent 6,064,383).

27. Regarding claims 14, 43 and 72; the claims are set forth with the same limits as claims 13, 42 and 71, respectively. Johnson et al<sup>383</sup> discloses *image components* but does not does not disclose *emotions* with relation to *image*. Skelly teaches *selecting an emotional appearance for a graphical character* that discloses the feature that *the sender emotions are conveyed by a manipulating one or more said image components* (64-66 in figure 5). A person of ordinary skill in the art of speech processing would have recognized that the benefit of displaying emotion imparts intensity beyond that which words can provide.



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28. Regarding claims 15, 44 and 73; the claims are set forth with the same limits as claims 13, 42 and 71, respectively. Johnson et al<sup>'383</sup> discloses *audio components* but does not does not disclose *emotions* with relation to *audio*. Skelly teaches *selecting an emotional prosody for a graphical character* that discloses the feature that *the sender emotions are conveyed by a manipulating one or more said audio components* (claims 3 & 7, column 8 lines 22-23 & 40-43). A person of ordinary skill in the art of speech processing would have recognized that the benefit of displaying emotion imparts intensity beyond that which words can provide.

**Johnson et al<sup>(s)</sup>, Cosatto et al & Lee et al**

29. Claims 88, 90 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al<sup>'383</sup> in view of Johnson et al<sup>'910</sup> and further in view of Cosatto et al and further in view of Lee et al.

30. Regarding claims 88, 90 and 92, Johnson et al<sup>(s)</sup> are silent on the matter of *code*. Lee et al (in tables 1 and 2, columns 3-5) provides at least a pseudocode that will *prepare a Multi-Mail message*. Indicating the need for this feature, Johnson et al<sup>'383</sup> describes the problem of words becoming "lost in translation" and in doing so, makes it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Lee et al to the device/method of Johnson et al<sup>'383</sup> thus providing a description to avoid the expense and uncertainty of translation.

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Regarding the other features of the claims:

- Johnson et al<sup>'383</sup> (column 1 lines 24-26) reads on the features contained in the preamble of the claims as that the *message (is) for transmission over a network*.
- With respect to claims 88 and 92, where Johnson et al<sup>'383</sup> is silent as to the issue of *medium* for both claims, Cosatto et al shows the intimate arrangement of processor operations and libraries (11 & 14 in figure 2) and, with the disclosure that *the processor consults circuitry or software* (column 10 lines 27-28) reads on the feature that the *software code is on computer readable medium* which would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Cosatto et al to the device/method of Johnson et al<sup>'383</sup> so as to employ the elements of a conventional PC.
- With respect to the *memory* of claim 90, Johnson et al<sup>'383</sup> is silent on the subject of processing allocations. Cosatto et al discloses (column 5 lines 38-39) that code is in memory and (column 8 lines 45-49 and 55-67) shows the advantages of performing operations in memory and so reads on the feature of *a memory having at least one region for storing computer executable program code*.

With Cosatto et al teaching the desirability of processing while the subject is speaking, it would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method-teachings of Cosatto et al to the device/method of Johnson et al<sup>'383</sup> and implement the faster memory of a PC over the relatively slower storage.

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- The remaining features of the claims to receive, *create, and synthesize* are the same as those found in claims 1, 30 and 59 and the claims are rejected for the same reasons.

### ***Conclusion***

31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

32. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, supervisor Richemond Dorvil can be reached at (703)305-9645.

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The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions,

or mailed to: Mail Stop AF (or CPA, etc. – see Official Gazette, 04 November 2003)  
P.O. Box 1450  
Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,  
2121 Crystal Drive, Arlington, VA,  
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan  
Examiner  
Art Unit 2654

DAN/d  
December 21, 2003

*Vijay Chawan* 12/29/03  
VIJAY CHAWAN  
PRIMARY EXAMINER